

What Is Claimed Is:

1. A method for delivering a plurality of video blocks to a user terminal serviced by a remote node comprising the steps of:
 - receiving, by a first WDM, a broadband signal from a broadband signal source;
 - separating, by said first WDM, said broadband signal into a plurality of optical bands;
 - modulating each of the plurality of optical bands with a composite signal representing data in a plurality of independent RF blocks to form a plurality of modulated signals;
 - forwarding said plurality of modulated signals to a second WDM to form a combined broadcast signal;
 - transmitting said combined broadcast signal over feeder fiber to a remote node;
 - further transmitting said combined broadcast signal over distribution fiber to a user's site;
 - and
 - selecting a RF block for distribution over a distribution fiber to a conventional satellite set-up box at a user's site.
2. The method according to claim 1, wherein said optical bands match a Free Spectral Range (FSR) of a Waveguide Grating Router (WGR) at said remote node.
3. The method according to claim 2, wherein said forwarding step further comprises the step of selecting a stack of RF blocks using an optical filter nominally matched to one of said first WDM's optical bands at said user's site, wherein said stack of RF blocks represents one optical band of said plurality of optical bands.

4. The method according to claim 3, further comprising the steps of:
block-converting said stack of RF blocks; and
bandpass filtering said block-converted stack of RF blocks to retrieve said selected RF block.

5. The method according to claim 4, wherein said combined broadcast signal is passively split and introduced to said WGR on a plurality of said WGR's input ports.

6. The method according to claim 5, wherein said combined broadcast signal is optically amplified prior to being passively split.

7. The method according to claim 6, wherein said delivery of a plurality of video blocks is augmented to additionally include delivery of switched services by using an additional narrowband signal source to provide a narrowband signal and by using an additional coarse WDM (CWDM) to detect and select said switched services prior to introduction of said passively split combined broadcast signal to said WGR.

8. A method for delivering a plurality of video blocks to a user terminal serviced by a service provider via a remote node and receiving a response sent by a user from a user site comprising the steps of:

receiving, by a first WDM, a broadband signal from a broadband signal source;
separating, by said first WDM, said broadband signal into a plurality of optical bands;

modulating each of the plurality of optical bands with a composite signal representing data in a plurality of independent RF blocks to form a plurality of modulated signals;

forwarding said plurality of modulated signals to a second WDM to form a combined broadcast signal;

transmitting said combined broadcast signal over feeder fiber to a remote node;

further transmitting said combined broadcast signal over distribution fiber to said user's site;

selecting a RF block using a conventional satellite set-up box at the user's site;

responding by the user at the user site with upstream information destined for a service provider; and

receiving by said service provider said upstream information from said user's site.

9. The method according to claim 8, wherein said optical bands match a Free Spectral Range (FSR) of a Waveguide Grating Router (WGR) at said remote node.

10. The method according to claim 9, wherein said forwarding step further comprises the step of selecting a stack of RF blocks using an optical filter nominally matched to one of said first WDM's optical bands at said user's site, wherein said stack of RF blocks represents one optical band of said plurality of optical bands.

11. The method according to claim 10, further comprising the steps of:

block-converting said stack of RF blocks; and

05915645-073001

bandpass filtering said block-converted stack of RF blocks to retrieve said selected RF block.

12. The method according to claim 11, wherein said combined broadcast signal is passively split and introduced to said WGR on a plurality of said WGR's input ports.

13. The method according to claim 12, wherein said combined broadcast signal is optically amplified prior to being passively split.

14. The method according to claim 13, wherein said delivery of a plurality of video blocks is augmented to additionally include delivery of switched services by using an additional narrowband signal source to provide a narrowband signal and by using an additional coarse WDM (CDWM) to detect and select said switched services prior to introduction of said passively split combined broadcast signal to said WGR.

15. A method for delivering a plurality of video blocks to a user terminal serviced by a remote node comprising the steps of:

receiving a broadband signal from each of a plurality of broadband signal sources, wherein each broadband signal is comprised of a plurality of optical bands;

impressing, by a plurality of modulators, RF signals on said corresponding optical bands to form a plurality of modulated signals;

combining said plurality of modulated signals to form a combined broadcast signal;

transmitting said combined broadcast signal over a feeder fiber to a remote node;

further transmitting said combined broadcast signal over distribution fiber to a user's site;
and
selecting a RF block using a conventional set-up at a user's site.

16. The method according to claim 15, wherein said optical bands match a Free Spectral Range (FSR) of a Waveguide Grating Router (WGR) at said remote node.

17. The method according to claim 16, wherein said combining step further comprises the step of selecting a stack of RF blocks using an optical filter nominally matched to one of said plurality of optical bands at said user's site, wherein said stack of RF blocks represents one optical band of said plurality of optical bands.

18. The method according to claim 17, further comprising the steps of:
block-converting said stack of RF blocks; and
bandpass filtering said block-converted stack of RF blocks to retrieve said selected RF block.

19. The method according to claim 18, wherein said combined broadcast signal is passively split and introduced to said WGR on said plurality of said WGR's input ports.

20. The method according to claim 19, wherein said combined broadcast signal is optically amplified prior to being passively split.

21. The method according to claim 20, wherein said delivery of a plurality of video blocks is augmented to additionally include delivery of switched services by using an additional narrowband signal source to provide a narrowband and by using a coarse WDM (CWDM) to detect and select said switched services prior to introduction of said passively split combined broadcast signal.

22. A method for delivering a plurality of video blocks to a user terminal serviced by a remote node comprising the steps of:

receiving a broadband signal from each of a plurality of broadband signal sources, wherein each broadband signal is comprised of a plurality of optical bands;

impressing, by a plurality of modulators, RF signals on said corresponding optical bands to form a plurality of modulated signals;

combining said plurality of modulated signals to form a combined broadcast signal;

transmitting said combined broadcast signal over a feeder fiber to a remote node;

further transmitting said combined broadcast signal over distribution fiber to a user's site;

selecting a RF block using a conventional set-up at a user's site;

responding by a user at the user's site with upstream information destined for a service provider; and

receiving by said service provider said upstream information from said user's site.

23. The method according to claim 22, wherein said optical bands match a Free Spectral Range (FSR) of a Waveguide Grating Router (WGR) at said remote node.

409745-1

24. The method according to claim 23, wherein said combining step further comprises the step of selecting a stack of RF blocks using an optical filter nominally matched to one of said plurality of optical bands at said user's site, wherein said stack of RF blocks represents one optical band of said plurality of optical bands.

25. The method according to claim 24, further comprising the steps of:
block-converting said stack of RF blocks; and
bandpass filtering said block-converted stack of RF blocks to retrieve said selected RF block.

26. The method according to claim 25, wherein said combined broadcast signal is passively split and introduced to said WGR on said plurality of said WGR's input ports.

27. The method according to claim 26, wherein said combined broadcast signal is optically amplified prior to being passively split.

28. The method according to claim 27, wherein said delivery of a plurality of video blocks is augmented to additionally include delivery of switched services by using an additional narrowband signal source to provide a narrowband and by using a coarse WDM (CWDM) to detect and select said switched services prior to introduction of said passively split combined broadcast signal.